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February 25 2005

Art Unit 2136: Examiner: Pramila Parthasarathy

Application Number 09/881,117 Richard M Gardner  
Remote authentication for secure system access and payment systems

**Documents enclosed:**

- 2 page letter response to Office Action
- 3 page response to Detailed Action
- 2 pages of additional (replacement) Claims 14 - 21
- 5 pages of amended original Claims 1 - 13



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With reference to your Office Action with mailing date of 11/30/2004, I respond to the objections raised therein in this letter and on the attachments.

#### General overview

In general, I respectfully submit that the objections raised should be withdrawn since my Application reveals a system markedly different and inherently superior to those taught by MOSLEY US51251259 and JREIJ US6178236. which respectively reveal in MOSLEY a system for a variable authentication Code related to the day of the week and with a maximum of 7 variations, and in JREIJ a backup system for a "super PIN" which is an alternative method for use as a master password if the normal password has been forgotten, related to (in a manner not explained) the time or day. The first - MOSLEY - is extremely limited and the second is not an actual authentication system so much as a Password Protection system, as its Title declares. These differences, especially the numerical superiority of my system, are made plain in my response to the Rejection of Claim 4 on the attached.

#### Variable authentication Code for each occasion of use

The Application describes a system for providing a Code which varies on each and every occasion of use: this description does not, I submit, apply to either of the two Patents cited. In the case of MOSLEY, the Codes are repeated every week, and after 7 uses on a given day: and in JREIJ, the back-up Code is related to the time and therefore may be different for each occasion of use (it is not in my view clear) but these occasions of use are only when the usual Password or (fixed) PIN has been forgotten. It does not appear to be suggested as an actual system at all, nor is it clear in my view how the user, having forgotten his or her Password, authenticates his or her self as the person entitled to read off from the telephone the Date and time from the LCD display on which the retrieval-Code depends.

This is in marked contrast to the system disclosed by the present Application, wherein a different Code is required for each and every occasion of use, derived from the Code card described and a numerical PIN.

## **Claims**

I have to say that I now regard my Claims as badly drafted and I respectfully submit revised and replacement Claims numbered 14 to 21 inclusive. These claims might appear at first sight to be very different from the originals (and I have taken the opportunity to reduce them somewhat) but in fact they represent a restatement of exactly the same principles with much greater brevity and clarity, founded of course upon precisely the same Description.

### **Claim 14 (to be the new claim 1 if accepted)**

For example, the new principal claim is:

14. An access card and authentication system in which a registered user may be verified by the user providing, from an array of data provided, a series of elements which together comprise a specific predetermined verification code which varies on each and every occasion of use.

I believe that this restatement, fully in line with the filed Description and in fact similar to that accepted by the UK Patent Office in the granted Patent GB2345175, clearly distinguishes the Application from those cited in both MOSLEY and JREIJ.

### **Relevant dates for my Application and relevance of JREIJ as cited**

I am unclear as to why the JREIJ case may be cited in relation to my Application at all: the dates are -

Application dated	June 12 2001
Filing Date	June 15 2001
Priority claimed from 60/212,794	June 19 2000
Publication date	January 30 2002

Accordingly the Priority Date claimed predates the JREIJ publication date of January 23 2001: however, my response to the Detailed Office Action assumes that it is relevant and attempts to distinguish my Application in case my view as to relevance as above is incorrect.

### **Response to the Detailed Action**

I set out on the attached my response to the Detailed Action in case my request to replace Claims 1 to 13 with the revised Claims 14 to 21 can not be accepted. In particular the Claims have been amended on a photocopy herewith to avoid rejection solely by reason of lack of correct punctuation.



**Richard M Gardner**

**Comments upon Detailed Action**

1. Noted

**Claim Objections**

2. Missing punctuation, now corrected herewith in manuscript on a photocopy (original disc not available)

**Claim rejections**

3. **Rejection of Claim 13** as using words not covered in the Description: I believe that this rejection may be met by substituting in Claim 13 the words "single use payment card number" for the words objected to of "unique proxy number": the former is used in the Specification and admittedly the words objected to are not. These words have been added in manuscript to Claim 13

4. **Rejection of Claims 1 – 5** as anticipated by MOSLEY

**Claim 1 and generally:** I respectfully reject the suggestion that my Application is in any way comparable with MOSLEY, for the following reasons:-

[a] MOSLEY discloses a matrix of random generated numbers which may be used for authentication depending upon the date used, with a maximum suggested of 7 Codes on any given day with 7 different sets, one for each day of the week. There is no suggestion whatsoever of there being a unique access code for each and every occasion of use, or that this Tuesday's Codes are any different from last Tuesday's Codes.

[b] MOSLEY discloses a private access code of 3 letters used to identify the correct numbers to be used for each day's access codes – a fixed Password or PIN to identify a usable variable card-based-matrix PIN, whereas my Application discloses an infinitely variable PIN derived partly from the card-based-matrix and partly from a conventional fixed PIN

[c] these differences are clear from the Claim, as in

"generating.....whereby a code may be uniquely specified"

"communicating..... appropriate access code on any given occasion"

these words being distinguishable from MOSLEY

As previously stated, however, the revised claims 14 to 21 make this significantly clearer and distinguishable.

**Claim 2:** I do not accept that MOSLEY discloses a method of providing a particular access code to be used on any given day of the year – it discloses

different codes for any given day of the week, although this week's will be the same as last week's.

**Claim 3:** I do not understand this Rejection since MOSLEY does not disclose a means of identification wherein the access codes comprise BOTH elements of a Fixed PIN and elements from a card-based matrix – in MOSLEY, the Fixed PIN (or 3 letter passcode) is used to identify the relevant access code, it is not a part of it.

**Claims 4 and 5:** the distinguishing feature here is that MOSLEY discloses a variable code for each day of the week with a maximum of 7 different codes for each day, a maximum of 49 in all, whereas my Application discloses generally a matrix of 365 different sets of codes, with many variations on each day. Specifically in Claim 4, the order in which the elements for each occasion of use is itself randomly generated as a prompt, to be replied to in the correct order by the user.

There may be confusion as to the “randomness” indicated: both MOSLEY and my Application disclose a random generation of code matrix data – 49 different numbers from 0 to 9 in the case of MOSLEY and perhaps three times that including letters for my Application.

My Claim 5 is intended to show that the required data may **itself** be randomised on the particular occasion: thus, for Friday 13 July, 2<sup>nd</sup> use with Fixed PIN 12345, the alternatives (based on my Fig 3 Code Card details) are:-

MOSLEY		My Application
		Generally Claim 4
CODE	say 387 (a 3 digit Code from 1000 possible codes, related solely to the day of the week)	Based upon WDM+3 PIN elements, 146125 or 1c4x6z125 = 1 from respectively 1,000,000 or about 17 Billion  The order of the elements may be randomly requested e.g. M25D1W = 625411

I do not agree that MOSLEY describes a means of providing a random order for the components: indeed, the first sentence of the Summary of the Invention of MOSLEY states that “If a PIN is used out of sequence, then access to the charge or credit card is denied by the card company”: no interactivity is apparent here or elsewhere in MOSLEY.

#### **5. Rejection of Claims 6 - 13 as anticipated by MOSLEY and JREIJ**

**Claim 6** is not with respect anticipated by MOSLEY, which nowhere indicates:

"generating.....whereby the component parts of the code may be uniquely specified"  
"generating.....a random order for each of the component parts"  
"inputting .....a specific unique access code"

Insofar as JREIJ is relevant (which is not accepted per the accompanying letter) it does not seem to me to disclose how the variable password is computed, merely that it is so computed. Thus, whilst it relates to a password being calculated according to the current time or date, it gives no details and it is not at all obvious to anyone (in my submission), whether skilled in the art or not, as to how the system is to be used at all, let alone to adapt MOSLEY. It promotes the "idea" of a time or date based password but no matrix of data is suggested or disclosed, and no means of actually replicating the time or date based password calculation is made plain.

**Claim 13:** my comments on this reason for Rejection are identical to those for Claim 6 – the Application is not anticipated by MOSLEY and JREIJ, if relevant, does not disclose in any meaningful way how MOSLEY might be adapted by a time/date function. After all, JREIJ is not put forward as an access system as such but as a means of providing a master PIN when the real one has been forgotten.


You state on page 10 after the recitation of my Claim 13: "MOSLEY does not explicitly disclose....representing each weekday, each date and each month" but I do not understand your use of the word **explicitly** in this context – it **does** explicitly disclose an array of 47 numbers, 7 for each day of the week, and some letter and I do not believe that a larger array for Date and Month can be inferred.

I do not accept that it was obvious, from MOSLEY and whether influenced by JREIJ or not, to progress from a list of 7 numbers for each weekday to a system permitting billions of possible codes dependant upon an interaction of code card matrix and Fixed PIN.

**Remaining rejections:** similar objections are raised to your Rejections of the remaining Claims, summarised briefly as under:-

**Claims 7, 8 & 9:** neither MOSLEY nor JREIJ refer to an access code varying with the actual date and elements of a fixed PIN

**Claims 10, 11 & 12:** I can see no reference in MOSLEY to a code being responsive to a prompt for the elements to be input in a particular order



Richard M Gardner